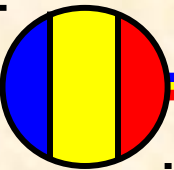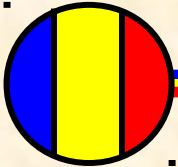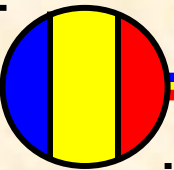# COE Replication Requirements (OPFOR Combat Systems)

Purpose

- **To provide the analytical methodology used to determine the OPFOR BTG OB required to achieve the military subset of COE conditions at each CTC, and the results of that analysis.**
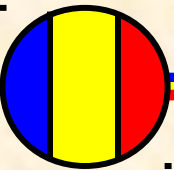
Agenda

- Assumptions

- Facts

- Scope

- Method
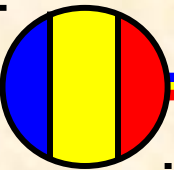
- Force Ratio Analysis

- Results of Wargame

- Troop Lists

Assumptions

• Army forces must be able to accomplish the tasks listed in FM 7-15, Army Universal Task List.

• Army training will focus on performance of FM 7-15 tasks.

• The CTC OPFOR Class VII items acquired today will be used to train Army forces beyond 2020.

• The fundamental principles of the current FM 25-100/101 will remain the cornerstone of Army training for the foreseeable future.

• Objective Force Brigades (Units of Action) will be more capable than today's units.

Assumptions (cont'd)

• **Army units will begin to train with interim Objective Force equipment prior to the complete fielding of the Objective Force.**

• **Army units will train using interim and Objective Force principles as soon as they become known to the force.**

Assumptions (cont'd)

- **NTC Blue Troop List: Near Future –**

  - **1x Ar Bn (44 M1)**
  - **2x Inf Bn (88 M2)**

  - **Squads: 44**
  - **HV AT: 38 (Javelin/TOW)**
  - **Arty: 36 M109A6, 6 MLRS**

  - **18-24 AH64 sorties per battle**
  - **0-6 UAV sorties per battle,**
  - **8 Fixed Wing sorties per battle**

Assumptions (cont'd)

- **JRTC Blue Troop List: Near Future –**

  - **3xLAV Bn (180 Combat LAVs)**

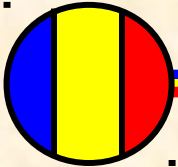 - **Squads: 54**
  - **HV AT: 14**
  - **Arty: 36 155 Towed**

  - **18-24 AH64 Sorties**
  - **0-6 UAV Sorties**
  - **8 FW Sorties**

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Assumptions (cont'd)

- **CMTC Blue Troop List: Near Future –**

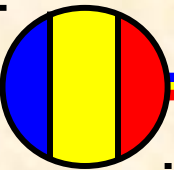 - **2xM1 or M2 Bn (88xM1/M2)**

  - **Squads: 44**
  - **Arty: 36 M109A6**
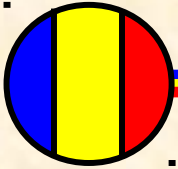
  - **18-24 AH64 Sorties**
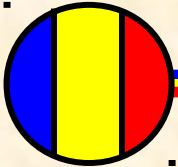 - **0-6 UAV Sorties**
  - **8 FW Sorties**

Facts

• **The function of the OPFOR is to provide the conditions in the task-condition-standard approach to performance-oriented training.**
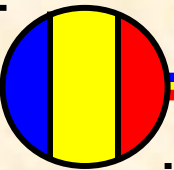
Scope

- This analysis covers systems and units from the following BOS:
- Maneuver
- Fire Support (minus EA)
- Air Defense
- Intel (Recon, but not ES)
- Mob/Ctrmob/Survivability

- C2 and Logistics (including and especially ORF and additional vehicles to cover maintenance-caused shortfalls) are not addressed.

- This briefing also does NOT address DTG/OSC level forces required at each training center (SPF, Commando, DTG/OSC fire support, etc.)

Method

- Determine Training Troop List

- Determine Task List

- Determine Troop List and Task with highest requirement for OPFOR

- Conduct force ratio analysis

- Conduct wargame of task execution using FR results and refine

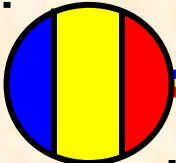- Form analytical results into logical troop formations

Force Ratios

• **Most difficult task OPFOR will have to conduct is Integrated Attack versus a defending US Brigade (+).**

• **Simple Force Ratio Required for Integrated Attack:**
  • **in Open Terrain or Airspace is 3.5:1.**
  • **in Mixed Terrain is 3:1.**
  • **in Close or Complex Terrain is 2.5:1.**

• **OPFOR Training and Morale advantage assessed at 0.5:1.**

• **Requirements:**
  • **3:1 Open (Air Defense)**
  • **2.5:1 Mixed Terrain (NTC, CMTC)**
  • **2:1 Close/Complex Terrain (JRTC)**

NTC Near Future

Simple Force Ratio (before wargame)

OPFOR Attack	FORCE RATIO	BLUEFOR (HV BDE)
• 339 Armored Vehicle Killing Systems [AT: 311, Arty: 18, Air: 10]	2.5:1	• 132 Armored Vehicles • [Tanks: 44 (1xBn), • IFV: 88 (2xBn)]
• 290 Infantry Killing Systems [IFV: 104, APC: 64 Squads:27, Tanks: 41, Arty: 54]	2.5:1	• 118 Infantry Defensive Systems [Squads: 44 (1sqd:2IFV), HV AT: 38, Arty: 36]
• 96 Air Killing Systems [Manpad: 84, Gun/Msl: 12]	3:1	• 32 Air Systems [24 AH64/UAV, 8 FW]

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JRTC Near Future

Simple Force Ratio (before wargame)

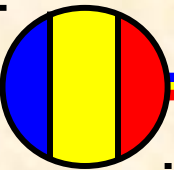| OPFOR Attack	FORCE RATIO	BLUEFOR (IBCT)
• 354 Armored Vehicle Killing Systems [AT: 274, IFV: 52, Arty: 18, Air: 10]	← 2:1 →	• 180 Armored Vehicles [3xLAV BN]
• 222 Infantry Killing Systems [Squads (incl paramil): 81, APC 64, Tanks: 41, Arty: 36]	← 2:1 →	• 104 Infantry Defensive Systems [Squads: 54 (1sqd:2 INF LAV), HV AT: 14, Arty: 36]
• 96 Air Killing Systems [Manpad: 84, Gun/Msl: 12]	← 3:1 →	• 32 Air Systems [24 AH64/UAV, 8 FW]

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CMTC Near Future

Simple Force Ratio (before wargame)

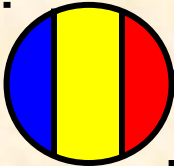| OPFOR Attack	FORCE RATIO	BLUEFOR (IBCT)
• **218 Armored Vehicle Killing Systems [AT: 208, Air: 10]**	**2.5:1**	• **88 Armored Vehicles [2xM1/M2 Bn]**
• **222 Infantry Killing Systems [Squads: 27, IFV 52 APC 64, Tanks: 41, Arty: 36]**	**2.5:1**	• **80 Infantry Defensive Systems [Squads: 44 (1sqd:2 IFV), Arty: 36]**
• **96 Air Killing Systems [Manpad: 84, Gun/Msl: 12]**	**3:1**	• **32 Air Systems [24 AH64/UAV, 8 FW]**

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NTC Wargame

Objective Questions:

• **Sufficient combat power and FP in fixing, assault and exploitation forces?**

• **Sufficient air defense of projected air AA's and key targets?**

• **Sufficient recon for expected requirements and support to penetrate enemy security forces?**

Results:

• Fixed two x TF at 1:2, assaulted one TF at 2.5:1, exploitation force fought reserve at 3:1.

• Point air defense coverage was maintained over all key formations and area coverage over three likely air AA's.

• IFV Co in recon battalion permitted penetration of Blue security and all 'red NAI's had coverage.
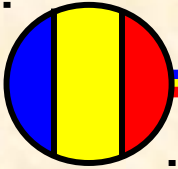
JRTC Wargame

Objective Questions:

- Sufficient combat power and FP in fixing, assault and exploitation forces?

- Sufficient air defense of projected air AA's and key targets?

- Sufficient recon for expected requirements and support to penetrate enemy security forces?

Results:

- Fixed two x LAV Bn at 1:3, assaulted one LAV Bn at 2:1, exploit. force fought reserve at 2.5:1.

- Point air defense coverage was maintained over all key formations and area coverage over three likely air AA's.

- Recon battalion required reinforcement in order to penetrate RISTA squadron security force. All 'red NAI's had coverage.
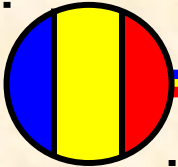
CMTC Wargame

Objective Questions:

• **Sufficient combat power and FP in fixing, assault and exploitation forces?**

• **Sufficient air defense of projected air AA's and key targets?**

• **Sufficient recon for expected requirements and support to penetrate enemy security forces?**
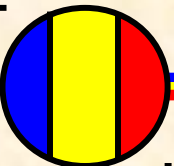
Results:

• **Fixed one TF (-) at 1:3, assaulted one TF at 2:1, exploit. force fought reserve at 3:1.**

• **Point and area air defense coverage was excessive for the AO, reduce by 27 MANPADS.**

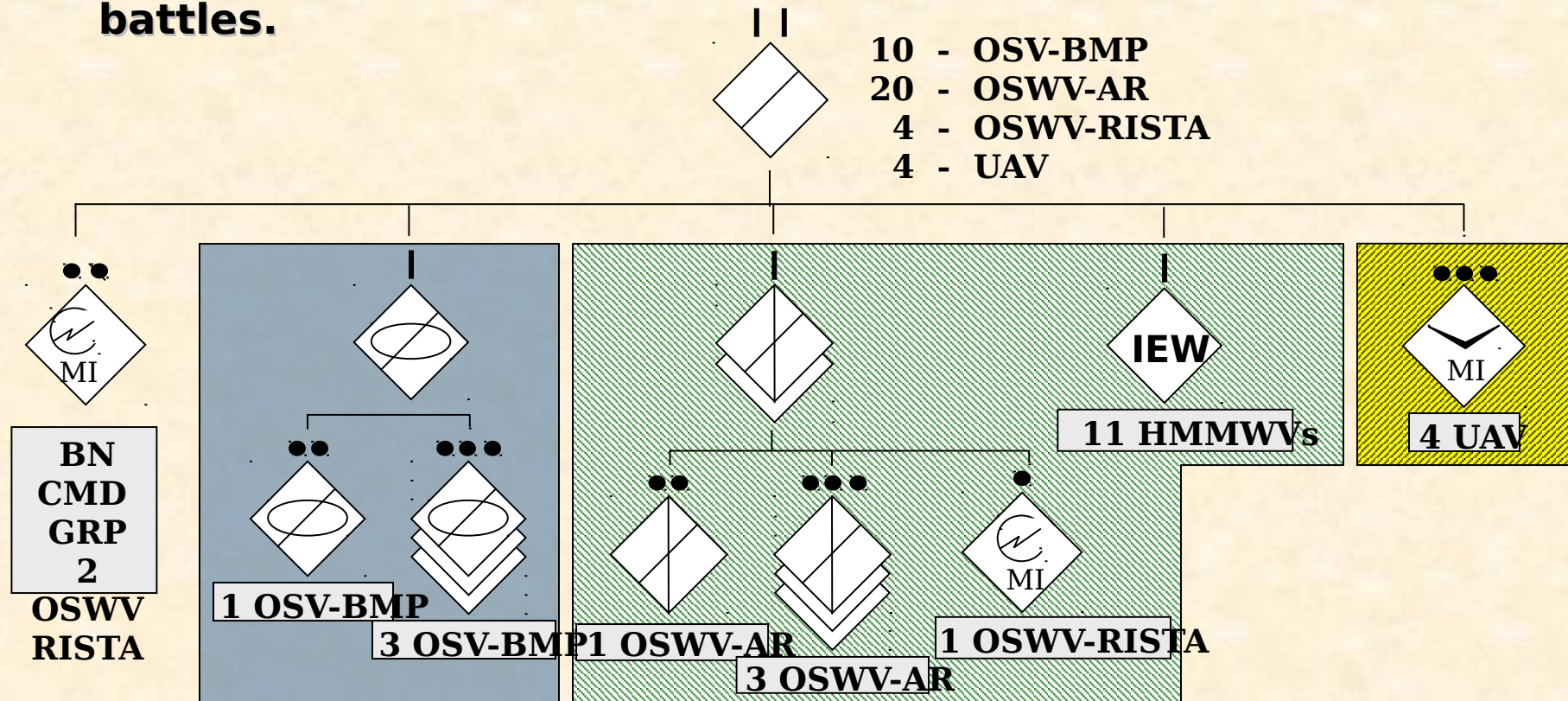• **IFV Co in recon battalion permitted penetration of Blue security and all 'red NAI's had coverage.**

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Recon

Required Capabilities:

- **Place surveillance on up to 18 recon targets.**

- **Provide for four priority targets to be detected and attacked through the same RISTA system.**

- **Intercept and DF voice and digital signals 1 to 1000 MHz.**

- **Provide continuous UAV coverage of one priority target area or surge to provide coverage of three target areas for a limited period of time.**

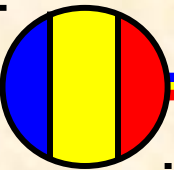- **Defeat a platoon-sized enemy security element. (JRTC: Defeat RISTA Troop-equivalent)**

Recon (cont'd)

The required capabilities can be met at NTC and JRTC by reinforcing the standard OPFOR recon battalion developed by TSD. At JRTC, additional reinforcement in terms of one maneuver platoon or company may be required in some battles.
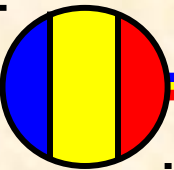
10 - OSV-BMP
20 - OSWV-AR
 4 - OSWV-RISTA
 4 - UAV

MI

BN CMD GRP 2
OSWV RISTA

1 OSV-BMP

3 OSV-BMP **1 OSWV-AR**

3 OSWV-AR

IEW

11 HMMWVs

MI

1 OSWV-RISTA

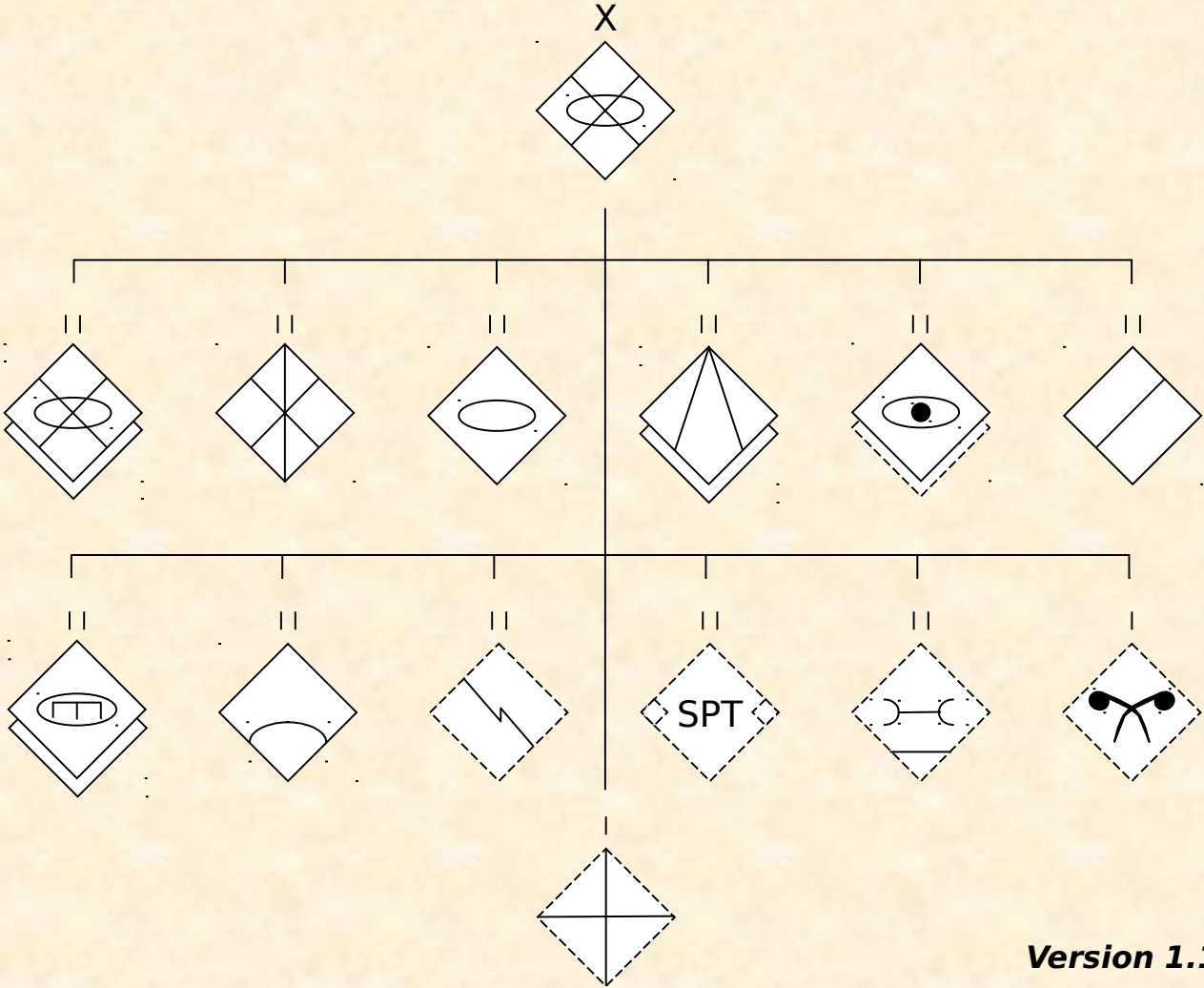**MI**

4 UAV

Engineer

Required Capabilities:

• Create up to six company-size complex BPs and associated obstacles.

• Provide for mobility of exploitation, assault and fixing forces for a BTG integrated attack.

The above requires one battalion
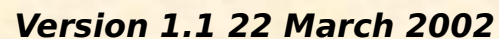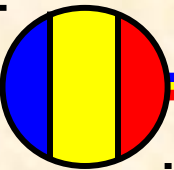at JRTC and CMTC but, requires two battalions at NTC.

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NTC Troop List
(BTG Only)

JRTC Troop List
(BTG Only)

X

Paramilitary

SPT

CMTC Troop List
(BTG Only)

Paramilitary

SPT